Digital TV and

“Plug & Play” Cable Functionality

Thomson

September 2002

"Plug & Play" Functionality

- **Defined: A DTV receiver with integrated cable reception electronics that permit a consumer to view both basic and premium cable video channels without the need for a set-top box**
- **Similar to Today's NTSC "Cable Ready" Television (authorized by § 624A)**

"Plug & Play" Functionality

- **Consumers Expect Nationwide Portability and Interoperability**

  Example:

  "Plug & Play" DTV receiver in Los Angeles used with AOLTimeWarner cable system should work if consumer moves to Philadelphia and subscribes to Comcast cable system

Five Steps To "Plug & Play"

- **Pick A National Plug & Play Standard**
- **Require Cable and CE Industries to Implement Standard By a Date Certain**
- **Require Cable Industry to Make Available a Fully Functional POD by January 1, 2003**
- **Reach Agreement on a Reasonable PHILA**
- **Ensure Access to Complete Channel Tuning Information**

THOMSON MULTI MEDIA

National "Plug & Play" Standard

- **Broad Agreement on Applicable SCTE and EIA Standards. Recommend FCC Mandate:**
  - **EIA-CEA 818D** for "Cable-Ready 1" DTV Receivers
    - One-way reception
  - **EIA-CEA 819A** for "Cable-Ready 3" DTV Receivers
    - Two-way reception; allows "Advanced IPPV"

THOMSON MULTI MEDIA

National “Plug & Play” Standard

- **Work on Advanced Functionality (OCAP) allowed to proceed on parallel track**
  - Possible implementation in future set-top box, or integrated into future television

Require Standards

- **Cable Operators Use Different Methods for Distribution of Digital TV Signals**
- **Impossible for CE Companies to Offer Consumers Same Uniform Cable Functionality For DTV That They Have Today With Analog (Pursuant to § 624A)**
- **Broadcasters have ATSC, and Cable Needs One Method Adopted by All**
- **CE Companies Need Certainty and Uniformity for Nationwide Portability**

THOMSON MULTI MEDIA

Require Fully Functional POD

- **More Than 2 Years After FCC Deadline, Fully Functional PODs Remain Unavailable**
  - Cable's POD must pass through channel tuning information for consumers to channel surf with DTV receivers
- **Cable's Support for POD Interface Eroding?**
- **FCC Should Require January '03 Availability of Fully Functional POD**

THOMSON MULTI MEDIA

Reasonable PHILA

- **No Independent CE Company Is Prepared To Sign the Current PHILA License**
- **Current PHILA Is Overly Broad, Overly Intrusive and Open-Ended**
  - Stranding early adopters with selectable output control
  - Content obliteration requirement for PVRs
- **Problems With PHILA Have Been Discussed Extensively With FCC, Including at May 10, 2002 "Hoedown"**

THOMSON MULTI MEDIA

Require Channel Tuning Info

- **In Hundred-Plus Channel Digital Universe, Consumers Will Demand At Least Rudimentary Channel Navigation Capability Without a Set-Top Box**
- **Cable Must Provide Channel Tuning Data, Either Through POD Or Through In-Band Source, Using ATSC Standard A65**

Require Channel Tuning Info

- **Why Is This So Important?**

  Without complete (cable and broadcast) channel tuning data, cable consumers must manually input (and remember) individual channel numbers into their DTV receivers, making normal "channel surfing" impossible

A Successful Digital TV Transition Requires Availability of Both Terrestrial and Cable Programming Sources Because Consumers Expect Full Functionality